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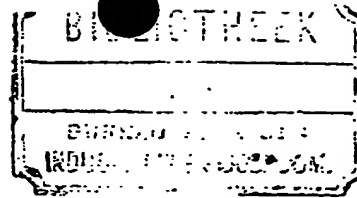
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PATENT SPECIFICATION



Application Date : July 14, 1920. No. 21,228 / 20.

170,356

Complete Left : Apr. 11, 1921.

Complete Accepted : Oct. 14, 1921.

PROVISIONAL SPECIFICATION.

Collapsible Boat without Rigid Structure.

I, ERNEST ARTHUR DODDS, of Airship Base, Howden, E. Yorks, British subject, do hereby declare the nature of this invention to be as follows:—

5 This collapsible boat which has no rigid structure to maintain its shape, obtains its buoyancy and rigidity from a triangulated structure composed of flexible fabric airbags or any other such flexible material.

10 This boat is capable of seating 8 men, and when deflated folds up into a space of 8" x 12" x 20" and can be inflated in

30 sec. by a compressed air bottle or by bellows in 2 mins.

This boat is practically unsinkable. 15

It is impossible to swamp or waterlog.

It is extremely light. Weight 28 lbs.

It is very difficult to upset; but should this be done the opposite side forms a boat also. 20

It is capable of being handled in a gale.

It can be towed at 25 knots successfully.

Dated this 14th day of July, 1921.

A. C. DAY, 25
Capt.

COMPLETE SPECIFICATION.

Collapsible Boat without Rigid Structure.

I, ERNEST ARTHUR DODDS, of Airship Base, Howden, E. Yorks, British subject, do hereby declare the nature of this invention and in what manner the same is to be performed, to be particularly described and ascertained in and by the following statement:—

30 This invention relates to improvements in reversible collapsible boats and in collapsible boats of the type composed of non-communicating fabric air bags connected to a flexible bottom, and wherein additional rigid means to maintain the shape of the boat are not employed.

40 According to this invention a boat is composed of three straight collapsible closed ended fabric air bags connected in the form of a triangle and combined with a triangular flexible fabric bottom, so as to be adapted, when inflated, to maintain its shape without any added rigid struc-

ture and to be used either side up. The boat may be stream-lined and may be provided with a collapsible water bag on each side to serve as a keel, and with row-locks, foot rests or stretchers and towing means, as hereinafter further described. 50

The boat when not inflated may be folded into a compact space for storage or transport. 55

The invention is illustrated in the accompanying drawings, in which:—

Fig. 1 is a side view; 60

Fig. 2 is a plan; and

Fig. 3 is a transverse section on the line 3—3 of Fig. 2.

The boat comprises a port air bag, 4, a starboard air bag, 5, and an aft or stern air bag, 6, arranged and connected together in a triangular form, as shown, and made of air and water tight closed 65

[Price 1/-]

ended fabric tubes. The numeral, 7, indicates a triangular fabric bottom, which is connected by lacing edges, 8, to and along the port and starboard bags at their mid heights, and along the lacing edges, 9 and 10, respectively to fore and aft aprons, 11 and 12, covering and attached to the air bags at their junctions and, in the case of the aft apron, attached along the same. The fore and aft aprons are attached to the air bags to give a streamline shape, as at 13 and 14.

15 are bags extending forward in the plane of symmetry of the boat from the aft air bag, and attached to the latter and to the aft apron, 12. Each bag is formed with a stiffened open mouth, 16, so that, in use, the lower bag becomes filled with water and serves as a keel, while the upper bag, 15, becomes flat, as shown.

17 are row-locks formed of aluminium or other metal skids or frames, with longitudinal and transverse tubes or members, 18, 19, which are secured by lacing, 20, or otherwise and by means of tension patches, 21, to the port and starboard air bags.

22 are rope stretchers for the oarsman to rest his feet against, whilst he sits in the angle formed at the apex of the port and starboard air bags, while the other members of the crew may sit on the wale formed by the port, starboard and aft air bags.

23 are towing patches, and 24, is an oar lanyard.

The air bags may be inflated by means of filler tubes, 25, from a blower or pump, and may be provided with pressure tube connections, 26, for the crew to maintain pressure by a small pump in emergency.

Having now particularly described and ascertained the nature of my said invention and in what manner the same is to be performed, I declare that what I claim is:—

1. A boat composed of straight closed ended collapsible fabric air bags connected in the form of a triangle and combined with a triangular flexible fabric bottom, so as to be adapted when inflated to maintain its shape without any added rigid structure and to be used either side up, substantially as described.

2. A collapsible boat according to Claim 1 provided with aprons to give a streamlined shape, substantially as described.

3. A collapsible boat according to Claim 1, constructed with water keels, substantially as described.

4. A collapsible boat constructed substantially as described, with reference to and as shown in the accompanying drawings.

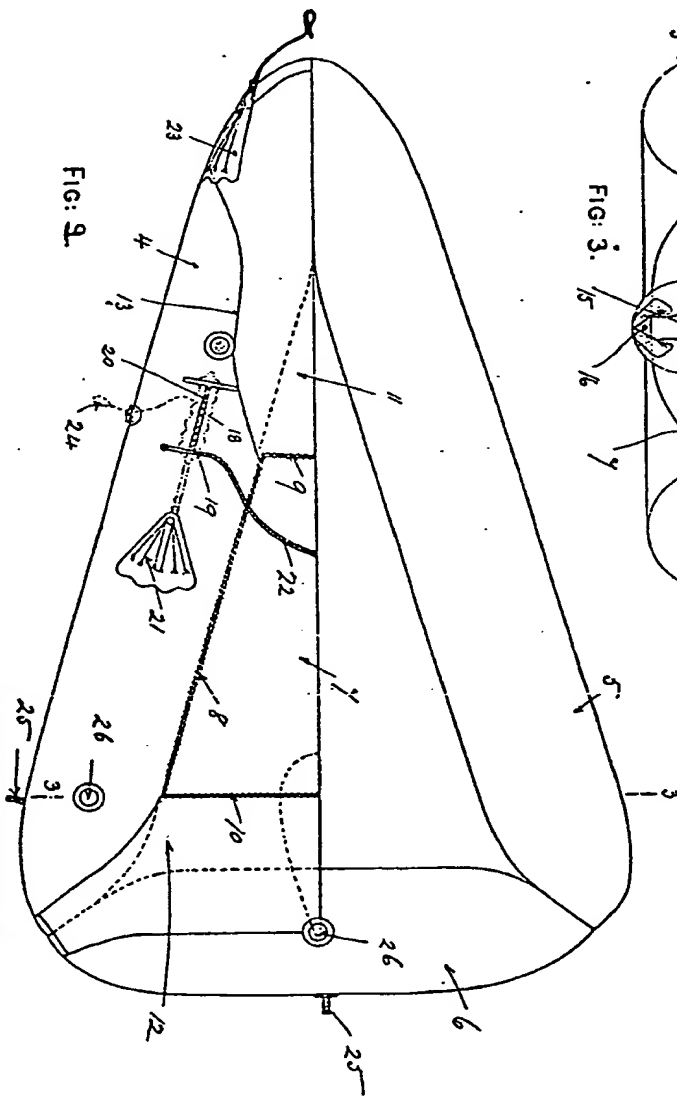
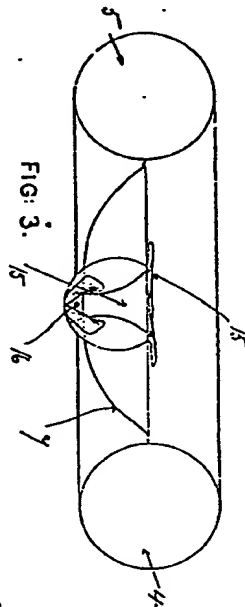
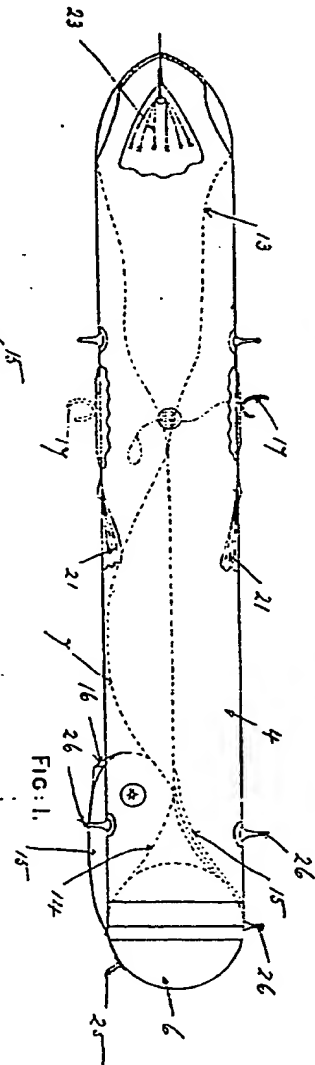
Dated this 1st day of April, 1921.

A. C. DAY,
Captain,
Agent for the Applicant.

[This Drawing is a reproduction of the Original on a reduced scale]

170356 COMPLETE SPECIFICATION

1 SHEET



W. & A. G. & Co. Ltd.

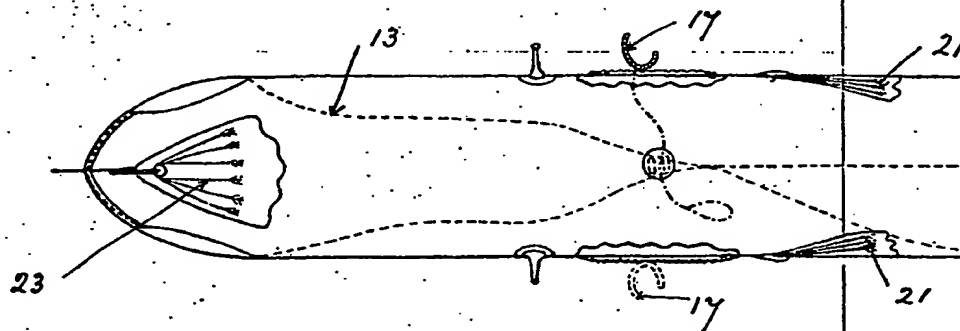


FIG: 3.

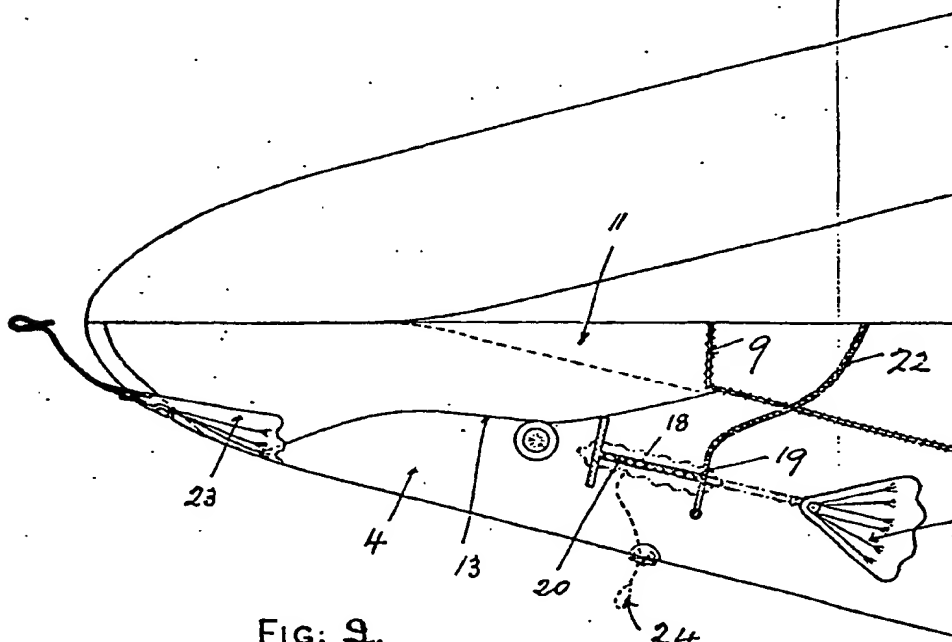


FIG: 9.

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